

WHAT IS CLAIMED IS

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1. A tuner for extracting specific signals from a set of signals on a carrier wherein the set of signals have at least one of a set of measurable characteristics, said tuner comprising:

5 means for determining from the measurable characteristics which are present in a particular set of signals certain desirable tuner operating characteristics; and

means operable under control of said determining means for changing the operating characteristics of said tuner.

2. The system set forth in claim 1 wherein said operating characteristics changing means includes:

means for changing power consumption levels with respect to certain of said tuner components.

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3. The invention set forth in claim 1 wherein said operating characteristics changing means includes:

means for determining optimum operating characteristics for said tuner depending upon said determined operating characteristics.

4. The system set forth in claim 3 wherein said operating characteristics changing means includes:

means for changing power levels with respect to certain of said tuner components, said power levels changed to the determined optimum level.

5. The invention set forth in claim 1 wherein said tuner is constructed on a single substrate.

6. The method of operating a tuner, said method comprising the steps of :
assessing from time to time the environment of the signals being processed by said tuner;
based upon said assessed environment selecting an operating level for said tuner; and
setting the operation of said tuner consistent with said selected operating level.

7. The method of claim 6 wherein said selecting step includes the step of selecting an optimum power level for said tuner.

8. The method of claim 7 wherein said last-mentioned step includes selecting optimum power levels for certain components of said tuner.

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9. The method of operating a tuner, said method comprising the steps of
determining optimal tuner operating characteristics from knowledge of the signals
being processed by the tuner; and
adjusting the tuner operating characteristic in accordance with said determining step.

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10. The method of claim 9 wherein said determining step includes the step of:
taking signal measurements of the signal being processed by the tuner.

11. The method of claim 10 wherein said signal measurement step includes the step
of:
determining total power across all channels.

12. The method of claim 9 wherein said determining step includes the step of:
receiving information from an external source.

13. The method of claim 9 wherein said determining step includes the step of:
monitoring the RF input and the inband receive signal strength.

14. The method set forth in claim 9 wherein said adjusting step includes the step of:
adjusting power consumption of certain components within said tuner.

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15. The method set forth in claim 14 wherein said last mentioned step includes the step of:

controlling current levels of said certain components.

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16. The method set forth in claim 9 wherein said determining step includes using the channel sweep and static methods at different times.

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17. The method set forth in claim 14 wherein said adjusting step includes the step of:

adjusting the number of components that are active at any particular time.

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18. A tuner comprising a circuit for determining tuner operating characteristics from knowledge of the signals being processed by the tuner; and

at least one circuit for adjusting the operating characteristic in accordance with said determining circuit.

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19. The tuner of claim 18 wherein said determining circuit includes a circuit for taking signal measurements of the signal being processed by the tuner.

20. The tuner of claim 19 wherein said signal measurement circuit includes a circuit for determining total power across all channels.

21. The tuner of claim 18 wherein said determining circuit includes a circuit for reviewing information from an external source.

22. The tuner of claim 18 wherein said determining circuit includes a circuit for monitoring the RF input and the inband receive signal strength.

23. The tuner of claim 18 wherein said adjusting circuit adjusts the power consumption of certain components within said tuner.

sub E1 24. The tuner of claim 18 wherein said adjusting circuit adjusts the current levels of certain components within said tuner.

sub E1 25. The tuner of claim 18 wherein said determining circuit includes channel sweep circuitry and static determination which circuitry operable at different times.

26. A tuner comprising circuitry for:
determining desired operating characteristics of certain tuner components from knowledge of the signals being processed by the tuner; and
circuitry operable in cooperation with said determining circuitry for adjusting the operating characteristics of said certain components.

sub E1 27. The tuner of claim 26 wherein said determining circuit includes circuitry for taking signal measurements of the signal being processed by the tuner.

28. The tuner of claim 26 wherein said adjusting circuits adjust power consumption of said certain components.

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29. The tuner of claim 28 wherein said adjusting circuitry controls current levels of said certain components.

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30. The tuner of claim 26 wherein said adjusting circuitry adds or subtracts said certain components into or out of said tuner.

31. The tuner of claim 26 wherein said determining circuit includes channel sweep circuitry and static determination circuitry operable at different times.

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32. A tuner operable for extracting certain signals from a set of signals, said tuner operable with at least two different signal sets, each signal set having a different operation characteristic, said tuner including:

determination circuitry for selecting which signal set is being processed at a point in time; and

adjustment circuitry operable in cooperation with said determination circuitry for changing power levels to certain tuner components in accordance with the signal set then being processed.

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33. The tuner of claim 32 wherein said adjustment circuitry is operable in cooperation with said determination circuitry for changing the component mix of said tuner.

34. The tuner of claim 32 wherein said determination circuitry includes channel sweep circuitry.

35. The tuner of claim 32 wherein said determination circuitry includes static determination circuitry.

36. The tuner of claim 32 wherein said determination circuitry includes both channel sweep circuitry and static determination circuitry.

37. The tuner of claim 36 wherein said channel sweep circuitry and said static determination circuitry are operable at different times.

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